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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,996	03/22/2001	Brian K. Schmidt	0007056-0084/P5407/BBC	7618

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EXAMINER

CASIANO, ANGEL L

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 05/20/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/816,996

Applicant(s)

SCHMIDT ET AL.

Examiner

Angel L. Casiano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8-12, 14 and 16 is/are rejected.
- 7) ☒ Claim(s) 5, 7, 13 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. The present Office action is in response to application filed 22 March 2001.
2. Claims 1-16 are pending. All claims have been examined accordingly.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 17 July 2003 was filed after the mailing date of the application. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Figure 2, "200" (see Page 17, line 22). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Application Layer "206" (Figures 2A-B). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office

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action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

7. The disclosure is objected to because of the following informalities:

- Information regarding co-pending U.S. patent application must be updated (see Page 3, line 3).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 6, 8-11, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reza et al. [US 2002/0085549 A1] in view of "Technical White Paper", VMware, Inc. [IDS].

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Regarding claim 1, Reza et al. teaches a method for migrating an open network connection (see Abstract, “network application”). The cited art discloses *encapsulating* a process (see “application layer”, “data”; Figure 2, “200”; Page 2, [0026]). The cited capsule is assigned a *locator* (see Page 2, [0028]; Page 3, [0040]). The capsule is then migrated (see Page 3, [0029], [0031]). However, the cited reference does not explicitly teach “encapsulating one or more *active* processes and a *system environment* relating to the processes into a *compute capsule*”. In addition, the cited reference fails to teach, “establishing one or more open network connections between said *compute capsule* and one or more other compute capsules”. Reza et al do not teach the step of “re-establishing said open network connection using said unique locator”. Regarding these limitations, VMware [IDS] teaches *encapsulating an entire computing environment* and move it between computers as easily as copying a file (see Page 2 of 7). In addition, a network connection is *re-established* according to VMware (see Page 5 of 7, “restore”, “on different computer”). At the time of the invention, one of ordinary skill in the art would have been motivated to combine the cited disclosures in order to implement a system where a virtual machine could be encapsulated and enabled to be moved freely among different physical machines (see VMware, Page 1 of 7). Furthermore, one of ordinary skill in the art would have been motivated to implement the teachings disclosed by VMware in order to obtain a platform with “high performance”, “portability”, and “easy installation” (see VMware, Page 2 of 7).

As for claim 2, Reza et al. teaches a method, having an IP address and a network locator (see Page 2, [0028], “source address” and “destination address”).

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As for claim 3, Reza et al. teaches a directory service (see Page 2, [0021], [0022]; “server”, “access network 102”).

As for claims 6 and 8, Reza et al. teaches migration. Furthermore, the cited reference teaches specialized *routers* (see Page 1, [0010]; Page 2, [0021]; Page 3, [0029]). Although Reza et al. does not teach *re-establishing* the *open network connection*, a connection is *re-established* according to VMware (see Page 5 of 7, “restore”, “on different computer”).

Regarding claim 9, Reza et al. teaches instructions (code) for migrating an open network connection (see Abstract, “network application”). The cited art teaches *encapsulating* a process (see “application layer”, “data”; Figure 2, “200”; Page 2, [0026]). The capsule is assigned a *locator* (see Page 2, [0028]; Page 3, [0040]) and is then migrated (see Page 3, [0029], [0031]). However, the cited reference does not explicitly teach code causing “encapsulating one or more *active* processes and a *system environment* relating to the processes into a *compute capsule*”. In addition, the cited reference fails to teach the code for, “establishing one or more open network connections between said *compute capsule* and one or more other compute capsules”. Reza et al do not teach the code for “re-establishing said open network connection using said unique locator”. Regarding these limitations, VMware [IDS] teaches *encapsulating an entire computing environment* and move it between computers as easily as copying a file (see Page 2 of 7). In addition, a network connection is *re-established* according to VMware (see Page 5 of 7, “restore”, “on different computer”). At the time of the invention, one of ordinary skill in the art would have been motivated to combine the cited disclosures in order to implement a system

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where a virtual machine could be encapsulated and enabled to be moved freely among different physical machines (see VMware, Page 1 of 7). Furthermore, one of ordinary skill in the art would have been motivated to implement the teachings disclosed by VMware in order to obtain a platform with “high performance”, “portability”, and “easy installation” (see VMware, Page 2 of 7). The cited combination of prior art would have provided encapsulation for a computer environment in order to be easily migrated (see “moved”) between computers (see VMware).

As per claim 10, Reza et al. teaches an IP address and a network locator (see Page 2, [0028], “source address” and “destination address”).

As per claim 11, Reza et al. teaches a directory service (see Page 2, [0021], [0022]; “server”, “access network 102”).

As for claims 14 and 16, Reza et al. teaches migration. Furthermore, the cited reference teaches specialized *routers* (see Page 1, [0010]; Page 2, [0021]; Page 3, [0029]). Although Reza et al. does not teach *re-establishing* the *open network connection*, a connection is *re-established* according to VMware (see Page 5 of 7, “restore”, “on different computer”).

10. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reza et al. [US 2002/0085549 A1] in view of “Technical White Paper”, VMware, Inc. [IDS] in further view of Golla et al. [US 6,587,874 B1].

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As per claim 4, the cited combination of references does not teach a directory service using LDAP or DNS. Regarding this limitation, Golla et al. teaches that LDAP is an Internet *standard* for accessing specialized directory services that run over TCP/IP (see col. 5, lines 15-23). Accordingly, Reza et al. teaches communication using the TCP/IP standard. Therefore, one of ordinary skill in the art would have been motivated to modify the combination of references, by specifying LDAP, in order to implement an "Internet standard" for the prior art TCP/IP communication.

As per claim 12, the cited combination of references does not teach a directory service using LDAP or DNS. Golla et al. teaches that LDAP is an Internet *standard* for accessing specialized directory services that run over TCP/IP (see col. 5, lines 15-23). Reza et al. teaches communication using the TCP/IP standard. Therefore, one of ordinary skill in the art would have been motivated to modify the combination of references, by specifying LDAP, in order to implement an *Internet standard* for the prior art TCP/IP communication.

Claim Objections

11. Claims 5, 7, 13, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Talanis et al. [US 20030172080 A1] teaches maintaining a permanent connection.
- Emmerink et al. [WO 01/22743 A2] teaches a method used to open, close or maintain connections in a communication network.
- Cordery et al. [US 6,151,590] teaches network open metering system.
- Yoshimura [US 5,825,649] teaches kernel substitution method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel L. Casiano whose telephone number is 703-305-8301. The examiner can normally be reached on 9:30-6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 703-308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

alc
10 May 2004.



JEFFREY GAFFIN
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